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REMARKS

Claims 20-27 and 57-64 are pending. By this Amendment, claims 22 and 26 are amended to more particularly point out Applicants' claimed invention. These claims are amended for clarity, and Applicants do not intend to narrow the scope of these amended claims. No new matter is introduced by these amendments, which involve minor rewordings.

Rejections Under 35 U.S.C. § 112

The Examiner rejected claims 22 and 26 under 35 U.S.C. § 112, second paragraph as being indefinite. Applicants maintain that the claims were clear as filed. However, to advance prosecution of the case, these claims have been amended for clarity. As amended, Applicants assert that the claims are clearly definite. Applicants respectfully request withdrawal of the rejection of claims 22 and 26 under 35 U.S.C. § 112, second paragraph as being indefinite.

Rejection Over Axelbaum et al.

The Examiner rejected claims 20, 21, 24, 54, 63 and 64 under 35 U.S.C. § 102(b) as being anticipate by U.S. Patent 5,498,446 to Axelbaum et al. (the Axelbaum patent). To simplify the present discussion, Applicants incorporate by reference their comments from the Preliminary Amendment of November 4, 2003. With all due respect, the Examiner is neglecting an explicit feature of the claimed invention. The Axelbaum very clearly does not prima facie anticipate Applicants' claimed invention. Applicants respectfully request reconsideration of the rejection based on the following comments.

Applicants' claimed invention is direct to an apparatus that has "a plurality of independent reactant streams configured to form independent product streams." The Examiner has failed to assert that the Axelbaum patent teaches independent product streams. Therefore, the Examiner has failed to assert a prima facie case for anticipation. The Axelbaum patent

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simply does not teach, suggest, motivate or relate in any way, shape or form to an apparatus that forms multiple independent product streams. Therefore, the Axelbaum patent does not come close to prima facie anticipation of Applicants' claimed invention. Applicants respectfully request withdrawal of the rejection of claims 20, 21, 24, 54, 63 and 64 under 35 U.S.C. § 102(b) as being anticipate by the Axelbaum patent.

Rejections Under 35 U.S.C. § 102(b) Over JP 61-67836

The Examiner rejected claims 20-22, 54, 55, 63 and 64 under 35 U.S.C. § 102(b) as being anticipated by Japanese published application JP 61-67836 (the JP '836 application). To simplify the present discussion, Applicants incorporate by reference the discussion in the Preliminary Amendment of November 4, 2003. With all due respect, the Examiner seems to misunderstand the legal requirements for a reference to anticipate a claim. To prima facie anticipate a claim, a single reference must teach all of the claim elements. The JP '836 application simply does not come close to prima facie anticipating Applicants' claimed invention. Applicants respectfully request reconsideration of the rejection based on the following comments.

Referring to MPEP 2131 (emphasis in original), "TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY CLAIM ELEMENT OF THE CLAIM." "For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference. These elements must be arranged as in the claim under review, but this is not an 'ipsissimis verbis' test." In re Bond, 15 USPQ2d 1566, 1567 (Fed. Cir, 1990)(Internal citations omitted and emphasis added.).

With all due respect, the Examiner is simply not using the legally required standards for formulating the rejection. Specifically, the Examiner is not pointing out the presence of all of the claim elements. On page 6, of the final office action of April 3, 2003, the

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Examiner asserts that removal of extra filter elements correspond to an omitted element. While this is not true, as explained below, it is completely irrelevant for an anticipation rejection. See MPEP 2144.04II, which is under obviousness and not anticipation. The JP '836 application simply does not teach multiple independent product flows directed to a single collector. Therefore, the JP '836 application does not teach all of the claim elements and does not prima facie anticipate Applicants' claimed invention. Applicants respectfully request withdrawal of the rejection of claims 20-22, 54, 55, 63 and 64 under 35 U.S.C. § 102(b) as being anticipated by the JP '836 application.

Rejection Under 35 U.S.C. § 103(a) Over JP '836 Application

The Examiner rejected claims 23, 25-27, 52, 53, 58 and 59 under 35 U.S.C. § 103(a) as being unpatentable over the JP '836 application. To simplify the discussion, Applicants incorporate by reference the discussion from the Preliminary Amendment of November 4, 2003. While Applicants do not acquiesce in the arguments regarding the obviousness of the specific features in these claims, the reference does not render obvious the broader invention of the independent claim. It is this non-obviousness of the broader claim that is the focus of the present discussion. Applicants maintain that the JP '836 application does not render claim 20 prima facie obvious. Applicants respectfully request reconsideration of the rejection based on the following comments.

"To establish prima facie obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art." MPEP 2143.03. "Therefore, '[w]hen determining the patentability of a claimed invention which combines two known elements, 'the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" *Id.* (quoting *In re Beattie*, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992)(quoting *Lindemann Maschinenfabrik GmbH v. American Hoist and*



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Derrick Co., 221 USPQ 481, 488 (Fed. Cir. 1984))). "In order to prevent a hindsight-based obviousness analysis, we have clearly established that the relevant inquiry for determining the scope and content of the prior art is whether there is a reason, suggestion, or motivation in the prior art or elsewhere that would have led one of ordinary skill in the art to combine the references." *Ruiz v. A.B. Chance Co.*, 57 USPQ2d 1161, 1167 (Fed. Cir. 2000). "The test is not whether one device can be an appropriate substitute for another." *Id.* (emphasis added). In *Ruiz*, the Federal Circuit overturned a district court holding that "it would have been obvious to combine screw anchors and metal brackets, because the need for a bracket 'was apparent.'" *Id.*

Similar principles must be applied when obviousness is based on the teachings of a single cited reference.

In appropriate circumstances, a single prior art reference can render a claim obvious. However, there must be a showing of a suggestion or motivation to modify the teachings of that reference to the claimed invention in order to support the obviousness conclusion. This suggestion or motivation may be derived from the prior art reference itself, from the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved. Determining whether there is a suggestion or motivation to modify a prior art reference is one aspect of determining the scope and content of the prior art, a fact question subsidiary to the ultimate conclusion of obviousness.

Sibia Neurosciences, Inc. v. Cadus Pharmaceutical Corp., 55 USPQ2d 1927, 1931 (Fed. Circuit 2000)(internal citations omitted, emphasis added).

In the present Office Action, the Examiner states that the JP '836 application teaches "a plurality of reactant inlets configured to direct a plurality of independent reactant streams configured to form independent product streams toward a plurality of product outlets; and a particle collection apparatus as claimed." However, Applicants' claimed invention is directed to an apparatus with "a particle collection apparatus connected to the one or more product outlets to collect the product particles generated by the reactants from the plurality of reactant inlets, wherein the particle collection apparatus is configured to receive product particles generated

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from the plurality of reactant streams." In the final Office Action of April 3, 2003, the Examiner argued that "the omission of an element (the extra filter)" was an obvious modification. However, the JP '836 application explicitly teaches away from this modification since it indicates the importance of separate collection. Furthermore, the objectives are clearly different. The JP '836 application teaches the importance of separate collection, while Applicants teach an objective of collection together of different particles. Since the objectives are opposite, the JP '836 application clearly does not motivate such a modification.

Since the JP '836 application does not teach, suggest or motivate the claimed particle collection apparatus, it does not render Applicants' claimed invention prima facie obvious. Applicants respectfully request withdrawal of the rejection of claims 23, 25-27, 52, 53, 58 and 59 under 35 U.S.C. § 103(a) as being unpatentable over the JP '836 application.

Rejection Over JP '836 and Beaty et al.

The Examiner rejected claims 24, 56, 57 and 60-62 under 35 U.S.C. § 103(a) as being unpatentable over the JP '836 application in view of U.S. Patent 5,194,128 to Beaty et al. (the Beaty patent). To simplify the present discussion, Applicants incorporate by reference the analysis from the Preliminary Amendment of November 7, 2003. Applicants maintain that there is no motivation to combine the references as suggested since the JP '836 application teaches away from the combination. Thus, the Examiner has failed to assert a case of prima facie obviousness. Applicants respectfully request reconsideration of the rejection based on the following comments.

Applicants previously discussed in detail the reasoning why there is no motivation to combine the references in the analysis incorporated by reference. In the Office Action of February 17, 2004, the Examiner asserts that the motivation is "always related to the properties or uses one skilled in the art would expect the structure to have." (Citations omitted). Furthermore, the Examiner asserts that "this would result in collecting manufactured particles



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from different individual outlet sources." But that is the point, the use taught by the JP '836 application is the separate collection of particles, while the use taught by the Beaty patent is the collection together of the particles. Furthermore, due to the different types of reaction processes, there is no reasonable expectation of success in combining the teachings of the two references.

As noted in Applicants' earlier Preliminary Amendment, the Examiner has failed to assert a legally supported or supportable position to establish prima facie obviousness. There is no motivation to combine the teachings of the JP '836 application with Fig. 5 of the Beaty patent since the JP '836 application teaches away from the combination and since the combination destroys the intended purpose of the structure in the JP '836 application. Furthermore, the combination does not provide a reasonable expectation of success. Since prima facie obviousness has not been established, Applicants respectfully request withdrawal of the rejection of claims 24, 56, 57 and 60-62 under 35 U.S.C. § 103(a) as being unpatentable over the JP '836 application as applied to claims 23, 25-27, 52, 53, 58 and 59, in view of the Beaty patent.

CONCLUSIONS

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

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The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

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